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What is claimed is:

1. A method for verifying authenticity of a replaceable printing component, the method comprising:

encrypting a data value stored on the replaceable printing component using a  
5 selected encryption technique to produce an encrypted value; and

comparing the encrypted value with an authentication value stored on the  
replaceable consumable whereby the replaceable printing component is authentic if the  
encrypted value is identical to the authentication value.

10 2. The method of claim 1 wherein the replaceable printing component is an ink supply  
for an inkjet printing system.

15 3. The method of claim 1 wherein prior to encrypting the data value stored on the  
replaceable printing component the steps of encrypting the data value using a selected  
encryption technique to produce an authentication value and storing each of the data  
value and the authentication value on the electrical storage device.

4. A method for storing a data value in an electrical storage device, the electrical storage  
device for use with a replaceable printing component, the method comprising:

20 encrypting the data value using a selected encryption technique to produce an  
authentication value; and

storing each of the data value and the authentication value on the electrical storage  
device.

25 5. The method of claim 4 wherein the replaceable printing component is an ink supply  
for an inkjet printing system.

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6. The method of claim 4 wherein further including the steps of:

encrypting a data value stored on the replaceable printing component using a selected encryption technique to produce an encrypted value; and

5 comparing the encrypted value with an authentication value stored on the replaceable consumable whereby the replaceable printing component is authentic if the encrypted value is identical to the authentication value.

7. The method of claim 4 wherein the steps of encrypting the data value and storing each of the data value and the authentication value on the electrical storage device are performed by a processing device other than a printing system.

8. The method of claim 6 wherein the steps of encrypting a data value stored on the replaceable printing component and comparing the encrypted value with an authentication value stored on the replaceable consumable are performed by a printing system.

9. The method of claim 6 further including the step of notifying customers that the replaceable printing component is not authentic if the encrypted value is different from the authentication value.

20 10. The method of claim 6 wherein the replaceable printing component is an ink supply and further including the step of providing ink from the replaceable printing component to a printing system if the encrypted value is identical to the authentication value.

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11. A method for customizing a replaceable printing component for use in only selected printing systems, the replaceable printing component having an electrical storage device for storing data in a first portion of the electrical storage device, the method comprising:

storing authentication data in a second portion of the electrical storage device, the authentication data derived from encrypting the first data using an encryption technique whereby prior to use of the replaceable printing component in the selected printing system requires resulting data from encryption of the first data using the encryption technique match the authentication data stored in the electrical storage device.

12. The method of claim 11 wherein the replaceable printing component is an ink supply and selected printing systems are inkjet printer portions.

13. A replaceable printing component for use in a selected printing system, the replaceable printing component including:

an electrical storage device configured for storing a data value and an identifier value, the identifier value is derived by encrypting the data value using an encryption process whereby upon installation of the replaceable printing component into the selected printing system the selected printing system processes the data value using the encryption process to obtain an encrypted value that is identical to the identifier value if the replaceable printing component is a verified replaceable printing component.

14. The replaceable printing component of claim 13 wherein the replaceable printing component includes a supply of ink and the selected printing system is an inkjet printing system configured to receive the supply of ink.